



CHAPTER 5

Installing the CTM R9.0 Client and Cisco Edge Craft

This chapter describes how to install and start the CTM client and Cisco Edge Craft on Microsoft Windows or Sun Solaris. Cisco Edge Craft is the local craft application used to manage ONS 15302 and ONS 15305 NEs.



Note

- You can have multiple versions of the Windows CTM client installed simultaneously (in different folders). When installing the CTM R9.0 client you can remove earlier versions, or leave them installed.
 - You cannot have multiple versions of the Solaris CTM client installed on a Solaris workstation.
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This chapter contains the following sections:

- [5.1 Installing the CTM Client and Cisco Edge Craft, page 5-1](#)
- [5.2 Upgrading the CTM Client Manually, page 5-12](#)
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- [5.4 New Zealand Daylight Saving Time Updates, page 5-14](#)



Note

For an explanation of error messages that you might encounter during the CTM client installation, see [Appendix B, “Understanding Installation Error Messages.”](#)

5.1 Installing the CTM Client and Cisco Edge Craft

This section describes how to install the CTM client and Cisco Edge Craft on Microsoft Windows and Solaris.

5.1.1 Installing the CTM Client and Cisco Edge Craft on Microsoft Windows

This section describes how to install the CTM client and Cisco Edge Craft on your Microsoft Windows workstation.


Note

You must have administrator privileges on the local workstation and the client software must be shut down before installing the CTM client.

5.1.1.1 Installing the CTM Client and Cisco Edge Craft

- Step 1** Insert the CTM client installation CD and navigate to `ctmc\win32\setup.exe`. Double-click **setup.exe**.
- Step 2** At the Introduction screen, click **Next**.
- Step 3** At the Destination Folder screen, complete the following substeps:
- Specify where you want to install the CTM client. The default destination folder is `C:\Cisco\TransportManagerClient9_0`. The text box is disabled. Click **Change** to choose a different destination.
 - Specify whether you want to create a CTM desktop icon, a CTM shortcut in the Start menu, or both. If you choose the Start menu shortcut option, specify the destination folder for the shortcut. The default shortcut folder is `Programs\Cisco Transport Manager`.
 - Click **Next**.


Note

If the destination directory that you specified is a new directory, you will receive the message “Specified directory does not exist, create it?” Click **Yes**.

- Step 4** At the Select Default Memory Configuration screen, specify the size of your server installation (small, medium, large, or high end). Click **Next**.
- Step 5** At the Launch Cisco Edge Craft screen, specify whether you want to install Cisco Edge Craft at the same time as the CTM client. If you choose to install Cisco Edge Craft, it will be installed in the `<CTM_home_directory>/CiscoEdgeCraft/` folder. Click **Next**.


Note

- The MGX Voice Gateway applications cannot be launched from the Domain Explorer if the CTM client is installed in a location that has spaces in the directory path.
- If you do not choose to install Cisco Edge Craft in [Step 5](#), you cannot install it manually during a second installation. Instead, if you decide to install Cisco Edge Craft later, you will need to uninstall the CTM client and then repeat the CTM client installation, this time checking the check box to install Cisco Edge Craft.
- If your Cisco Edge Craft is bundled and installed with a CTM client, you cannot upgrade it with a standalone Cisco Edge Craft package.
- Cisco Edge Craft is an SNMP-based application. Verify that the workstation performing the installation can reach the ONS 1530x devices through UDP port 161 before launching Cisco Edge Craft.

- Step 6** The Pre-Installation Summary screen shows the items that will be installed and the space that is required. Click **Install**.
- Step 7** The Install Complete screen summarizes the results of the installation. Click **Done**.
- Step 8** Eject the CTM client installation CD.
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5.1.1.2 Specifying the Default Browser to Display the Online Help

In Microsoft Windows, CTM uses the default browser to display the online help. If you want to use a specific browser to launch the CTM online help, make that the default browser for your workstation.

**Note**

During testing, Cisco uses Internet Explorer and Mozilla to display the online help; other browsers have not been tested.

The online help for Cisco Edge Craft requires Adobe Acrobat Reader. Acrobat Reader is not required in your path environment variable, but the PDF file type must be associated with Acrobat Reader.

5.1.1.2.1 Special Considerations when Proxy Server Is Enabled

If you are using a proxy-server enabled web browser, complete one of the following options, depending on your browser type.

For Internet Explorer, complete the following steps:

-
- Step 1** Choose **Tools > Internet Options**.
- Step 2** Click the **Connections** tab.
- Step 3** Click the **LAN Settings** button.
- Step 4** Complete one of the following options:
- Uncheck the **Use a proxy server for your LAN** check box.
 - If the *Use a proxy server for your LAN* check box must remain checked, click **Advanced**. Enter your server IP address in the *Do not use proxy server addresses beginning with* field. Separate each address with a semicolon.
- Step 5** Click **OK**.
-

For Mozilla, complete the following steps:

-
- Step 1** Choose **Edit > Preferences**.
- Step 2** Expand **Advanced** and choose **Proxies**.
- Step 3** Complete one of the following options:
- If you do not want to use a proxy, click **Direct connection to the Internet**.
 - If you do not have a proxy location (URL), click **Manual proxy configuration**. In the *No Proxy for* field, enter the domains that you do not want to use a proxy for. Use a comma to separate domains.

Step 4 Click **OK**.

5.1.1.3 Enabling the SSH Remote Access CLI for MGX

This procedure explains how to use the SSH client from SSH Communications Security or Tectia. Other SSH clients from other vendors are not supported. PuTTY is supported. This procedure applies only to MGX devices.

Step 1 Obtain SSH Tectia from www.ssh.com.

Step 2 Install SSH Tectia.

Step 3 Open the local PC folder where Tectia is installed.

Step 4 Change the name of the ssh-client-g3.exe executable to **sshclient.exe**.



Note The ssh-client-g3.exe filename is valid in Tectia release 5.1.3.8; the filename might be different for other release numbers.

Step 5 Verify that the executable file exists in the current path. To do this, open a DOS shell and launch the sshclient.exe executable manually.

Step 6 If the executable file does not exist in the current path, set the path environment to the directory path of sshclient.exe. To do this, complete the following substeps:

- a. Right-click **My Computer** and choose **Properties**.
 - b. Click the **Advanced** tab; then, click **Environment Variables**.
 - c. Select the **PATH** variable and add an entry for the SSH Client directory path.
 - d. Click **OK**; then, click **OK** to close the System Properties dialog box.
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5.1.2 Starting the CTM Client in Microsoft Windows

It is not necessary to restart the workstation before starting the CTM client.

Step 1 Depending on the option you chose during installation, double-click the CTM desktop icon or choose the CTM Start menu shortcut to start the client. The Cisco Transport Manager - Login window appears (see [Figure 5-1](#)), displaying the default Cisco text.



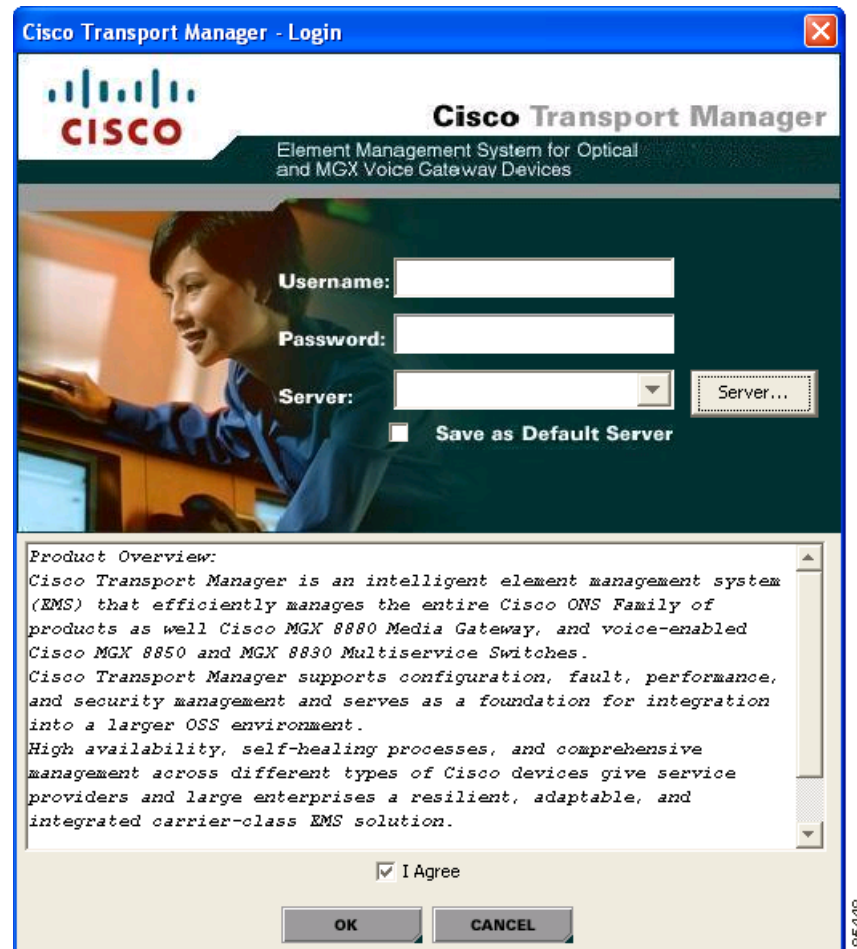
Note The text displayed in the Cisco Transport Manager - Login window can be customized to display information for the particular server that you want to connect to. To display your own custom message, you must create a text file that contains your custom text. Save the file with the filename OtherLegal.txt in the /opt/CiscoTransportManagerServer/webServer/htdocs/config directory.

By default, the /config directory does not exist in the original installation. To create the directory, enter the following commands as the root user:

```
cd /opt/CiscoTransportManagerServer/webServer/htdocs
```

```
mkdir config
```

Figure 5-1 Cisco Transport Manager - Login Window



Step 2 The first time you log in, use the default username and password:

- Username: **SysAdmin**
- Password: **Ctm123!**



Note

The username and password are case sensitive. After you enter the password, the Password field displays a fixed-length string of 15 asterisks (*), regardless of the actual length of the password.

Step 3 Supply the details of the server that you want to connect to in the Server field, in one of the following ways:

- Click the **Server** button. Enter the CTM server hostname or IP address in the Selection Server dialog box. Click **Save** to save your server details in the Server drop-down list.
- Click the **Server** drop-down list and choose the server that you want to connect to.

**Note**

- When the selected server has the OtherLegal.txt file saved in the /opt/CiscoTransportManagerServer/webServer/htdocs/config directory, the text contained in this file appears in the text area of the Cisco Transport Manager - Login window. If the selected server does not have the OtherLegal.txt file present, the default Cisco message shown in [Figure 5-1](#) is displayed.
- The I Agree check box is unchecked when the OtherLegal.txt file is present in the CTM server installation. The I Agree check box is checked by default when the OtherLegal.txt file is not present in the CTM server installation.

**Tip**

Check the **Save As Default Server** check box to save the selected server as your default server for the next time you log in.

Step 4 Check the **I Agree** check box (if it is not already checked).

Step 5 Click **OK**.

**Note**

Do not enter a hostname unless Domain Name System (DNS) is enabled in your network.

Step 6 By default, for security reasons you are prompted to change the password after you log in for the first time. Click **Yes**. The password complexity is configurable in the Control Panel > Security Properties pane. By default, the password must:

- Contain at least six characters, but not more than 15 characters.
- Contain at least two alphabetic characters (A–Z, a–z). Of the alphabetic characters, at least one must be uppercase and one must be lowercase.
- Contain at least one numeric character (0–9).
- Contain at least one special character (+ # % , . ; & !). The default special character set is TL1+UNIX.
- Allow a special character as the first or last character.
- Allow a numeric character as the first or last character.
- Not contain the username or any circular shift of the username. An uppercase letter and its corresponding lowercase letter are considered equivalent. For example, if the username is Arthur, the password cannot contain the string arthur, rthura, thurar, hurart, urarth, or rarthu.
- Differ from the old password by at least three characters. For example, if the old password is MikeBrady5!, the new password cannot be mikebrady5% because only the last character is different. However, the new password MikeBrady2!99 is acceptable because it differs from MikeBrady5! by three characters.

Step 7 Change the password; then, click **OK**.

Step 8 Click **OK** in the log in advisory dialog box.

5.1.3 Starting Cisco Edge Craft in Microsoft Windows

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- Step 1** Choose **Start > Programs > Accessories > Command Prompt** to open a Windows DOS Command Prompt window.
- Step 2** Change directories to the `<CTM_home_directory>/CiscoEdgeCraft/bin` directory.
- Step 3** Double-click the **CiscoEdgeCraft.exe** file. The Cisco Edge Craft login screen appears.



Note It is not necessary to restart the workstation.

- Step 4** At the Cisco Edge Craft login screen, complete the following substeps:
- Enter the IP address of the NE that you want to connect to.
 - Ignore the User field.
 - Enter the Password string. The password string represents the NE community string, which is set in the NE flash memory by using the command-line interface (CLI).
 - Click **Logon**.
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5.1.4 Installing the CTM Client and Cisco Edge Craft on Sun Solaris

This section describes how to install the CTM client and Cisco Edge Craft on your Sun Solaris 10 workstation.

5.1.4.1 Installing the CTM Client and Cisco Edge Craft

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- Step 1** Log in as the root user and insert the CTM client installation CD.
- Step 2** From a terminal window, enter the following commands:
- ```
cd /cdrom/cdrom0/ctmc/solaris/Disk1
./ctmcsetup.sh
```
- The CTM client installation begins. Wait for up to 60 seconds while the following message appears:
- ```
Installing Cisco Transport Manager client...
```
- Step 3** At the Introduction screen, click **Next**.
- Step 4** At the Destination Folder screen, complete the following substeps:
- Specify where you want to install the CTM client. The default destination folder is `/opt/CiscoTransportManagerClient`. You can click **Change** to choose a different destination.
 - If you want to add a CTM icon to the Common Desktop Environment (CDE) front panel or add a CTM entry to the CDE Workspace menu, check the appropriate check box(es):
 - Add Icon to CDE Front Panel**
 - Add Entry to CDE Workspace Menu**

These options allow you to launch the CTM client without having to open a terminal or console window and invoke the **ctmc-start** command. If you choose either option, you might have to perform one of the following actions to see the changes:

- Restart your CDE Window Manager
- Log out of CDE; then, log back in
- Reboot the system

c. Click **Next**.



Note

- If the destination directory that you specified is a new directory, you will receive the message “Specified directory does not exist, create it?” Click **Yes**.
- Do not specify any mount point as the target installation directory for the client installation, or the installation data might be lost when the workstation restarts.

Step 5 At the Select Default Memory Configuration screen, specify the size of your network (small, medium, large, or high end). Click **Next**.

Step 6 At the Launch Cisco Edge Craft screen, specify whether you want to install Cisco Edge Craft at the same time as the CTM client. If you choose to install Cisco Edge Craft, it will be installed in the CTM client folder. Click **Next**.



Note

- If you do not choose to install Cisco Edge Craft in [Step 6](#), you cannot install it manually during a second installation. Instead, if you decide to install Cisco Edge Craft later, you will need to uninstall the CTM client and then repeat the CTM client installation, this time checking the check box to install Cisco Edge Craft.
- If your Cisco Edge Craft is bundled and installed with a CTM client, you cannot upgrade it with a standalone Cisco Edge Craft package.
- Cisco Edge Craft is an SNMP-based application. Verify that the workstation performing the installation can reach the ONS 1530x devices through UDP port 161 before launching Cisco Edge Craft.

Step 7 At the CTM Group Information screen, enter the name of the UNIX group to which you want to assign administrator privileges. The default is the group name of the root user. You can uncheck the *Ignore user-entered group name* check box and enter the group name of your choice. After you specify the CTM group name, click **Next**.



Note

The group name must exist on the UNIX workstation in order for the CTM installation to proceed. The users that belong to the group must have the **umask 002** command configured.

Step 8 The Pre-Installation Summary screen shows the items that will be installed and the space that is required. Click **Install**.

Step 9 The Install Complete screen summarizes the results of the installation. Click **Done**.

Step 10 Enter the following commands to eject the CTM client installation CD:

```
cd /
eject cdrom
```

5.1.4.2 Requirements to Display the Online Help

The online help for Cisco Edge Craft requires Adobe Acrobat Reader installed and included in your path environment variable.



Tip

If you cannot launch the online help, open a command prompt from another window and enter the **xhost + command**, providing the full path name. Also, verify that the DISPLAY variable is set correctly.

5.1.4.3 Verifying the Mozilla Version for the Solaris Client

To verify the application version running on the Solaris client, enter the following commands on the command line:

- To create a link in /usr/bin that points to Mozilla version 1.7, enter:

```
ln -s /usr/sfw/bin/mozilla /usr/bin/mozilla
```

- To verify the environmental variables for Mozilla, enter:

```
echo $PATH
```



Note "/usr/bin/" should be found inside the ld library path string.

```
echo $LD_LIBRARY_PATH
```



Note "/usr/local/lib" should be found inside the path string.

- To correct the environmental variables for Mozilla, enter:

```
setenv PATH /usr/bin:$PATH
setenv LD_LIBRARY_PATH /usr/local/lib
```

- To verify the correct version of Mozilla, enter:

```
mozilla -version
```

- In the output, you should see the correct Mozilla version:

```
Mozilla 1.7, ...
```

5.1.5 Starting the CTM Client in Sun Solaris

Step 1 At the console, enter one of the following commands, depending on the size of your network configuration:

- If you are connecting to a small server, enter:
`./ctmc-start -small`
- If you are connecting to a medium server, enter:
`./ctmc-start -medium`
- If you are connecting to a large server, enter:
`./ctmc-start -large`
- If you are connecting to a high-end server, enter:
`./ctmc-start -highend`



Caution

In the Bourne shell, if you enter **ctmc-start** to start the client and then execute **Ctrl+C** in the xterm window where the client was launched, the CTM client will terminate.



Note

The installation program creates a soft link on /usr/bin for ctmc-start. If the soft link is missing, enter `<install_directory>/ctmc-start` at the console.

The following message appears:

```
Starting Cisco Transport Manager client. Please wait.
```

Step 2 Wait 10 to 20 seconds for the CTM client application to start. The Cisco Transport Manager - Login window appears (see [Figure 5-1](#)), displaying the default Cisco text.



Note

The text displayed in the Cisco Transport Manager - Login window can be customized to display information for the particular server that you want to connect to. To display your own custom message, you must create a text file that contains your custom text. Save the file with the filename `OtherLegal.txt` in the `/opt/CiscoTransportManagerServer/webServer/htdocs/config` directory.

By default, the `/config` directory does not exist in the original installation. To create the directory, enter the following commands as the root user:

```
cd /opt/CiscoTransportManagerServer/webServer/htdocs
mkdir config
```

Step 3 The first time you log in, use the default username and password:

- Username: **SysAdmin**
- Password: **Ctm123!**



Note

The username and password are case sensitive. After you enter the password, the Password field displays a fixed-length string of 15 asterisks (*), regardless of the actual length of the password.

- Step 4** Supply the details of the server that you want to connect to in the Server field, in one of the following ways:
- Click the **Server** button. Enter the CTM server hostname or IP address in the Selection Server dialog box. Click **Save** to save your server details in the Server drop-down list.
 - Click the **Server** drop-down list and choose the server that you want to connect to.

**Note**

- When the selected server has the OtherLegal.txt file saved in the /opt/CiscoTransportManagerServer/webServer/htdocs/config directory, the text contained in this file appears in the text area of the Cisco Transport Manager - Login window. If the selected server does not have the OtherLegal.txt file present, the default Cisco message shown in [Figure 5-1](#) is displayed.
- The I Agree check box is unchecked when the OtherLegal.txt file is present in the CTM server installation. The I Agree check box is checked by default when the OtherLegal.txt file is not present in the CTM server installation.

**Tip**

Check the **Save As Default Server** check box to save the selected server as your default server for the next time you log in.

- Step 5** Check the **I Agree** check box (if it is not already checked).

- Step 6** Click **OK**.

**Note**

Do not enter a hostname unless DNS is enabled in your network.

- Step 7** By default, for security reasons you are prompted to change the password after you log in for the first time. Click **Yes**. The password complexity is configurable in the Control Panel > Security Properties pane. By default, the password must:
- Contain at least six characters, but not more than 15 characters.
 - Contain at least two alphabetic characters (A–Z, a–z). Of the alphabetic characters, at least one must be uppercase and one must be lowercase.
 - Contain at least one numeric character (0–9).
 - Contain at least one special character (+ # % , . ; & !). The default special character set is TL1+UNIX.
 - Allow a special character as the first or last character.
 - Allow a numeric character as the first or last character.
 - Not contain the username or any circular shift of the username. An uppercase letter and its corresponding lowercase letter are considered equivalent. For example, if the username is Arthur, the password cannot contain the string arthur, rthura, thurar, hurart, urarth, or rarthu.
 - Differ from the old password by at least three characters. For example, if the old password is MikeBrady5!, the new password cannot be mikebrady5% because only the last character is different. However, the new password MikeBrady2!99 is acceptable because it differs from MikeBrady5! by three characters.

- Step 8** Change the password; then, click **OK**.

Step 9 Click **OK** in the login advisory dialog box.

5.1.6 Starting Cisco Edge Craft in Sun Solaris

Step 1 Depending on the option you chose during installation, execute the link that you specified, or enter the following command:

```
/opt/CiscoTransportManagerClient/CiscoEdgeCraft/bin/CiscoEdgeCraft
```

Step 2 At the Cisco Edge Craft login screen, complete the following substeps:

- a. Enter the IP address of the NE that you want to connect to.
 - b. Ignore the User field.
 - c. Enter the Password string. The password string represents the NE community string, which is set in the NE flash memory by using the CLI.
 - d. Click **Logon**.
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5.2 Upgrading the CTM Client Manually

This section describes how to manually upgrade the CTM client.



Note

You must have Administrator privileges on the local workstation and the client software must be shut down before installing the CTM client.

5.2.1 Upgrading the CTM Client or Cisco Edge Craft on Microsoft Windows

If you installed a previous version of the CTM client and you want to install another version of the CTM client in the same location on your system, it is recommended that you uninstall the previous version before installing the CTM R9.0 client or Cisco Edge Craft. If you want to have another version of the CTM client in your system without uninstalling the previous version, choose a different folder to install the CTM client.

To uninstall a CTM client, see [C.3 Uninstalling the CTM Client and Cisco Edge Craft on Microsoft Windows, page C-2](#).

To install the CTM Client and Cisco Edge Craft, see [5.1.1 Installing the CTM Client and Cisco Edge Craft on Microsoft Windows, page 5-2](#).

5.2.2 Upgrading the CTM Client or Cisco Edge Craft on Sun Solaris

If you installed a previous version of the CTM client and you want to install another version of the CTM client in the same location on your system, it is recommended that you uninstall the previous version before installing the CTM R9.0 client or Cisco Edge Craft. If you want to have another version of the CTM client in your system without uninstalling the previous version, choose a different folder to install the CTM client.

To uninstall a CTM client, see [C.4 Uninstalling the CTM Client and Cisco Edge Craft on Sun Solaris, page C-3](#).

To install the CTM Client and Cisco Edge Craft, see [5.1.4 Installing the CTM Client and Cisco Edge Craft on Sun Solaris, page 5-7](#).

5.3 Upgrading the CTM Client Automatically

It is possible to automatically upgrade each CTM R8.0 or later client installation to the latest version of CTM when it connects to a server.

During login, if the CTM client software version is older than the CTM server software version, you are prompted to upgrade your CTM client. See [5.1.2 Starting the CTM Client in Microsoft Windows, page 5-4](#) or [5.1.5 Starting the CTM Client in Sun Solaris, page 5-10](#) for more information.

To upgrade your CTM client you must copy the client installation files to the CTM server. The CTM client and server installation files reside on separate installation CDs. Files for the Solaris client are located on Disk1; files for the Windows client are located on Disk 2.

To copy the client installation files to the server complete the following steps:

**Note**

The CTM server must be installed before proceeding.

- Step 1** Log in as the root user.
- Step 2** Enter the following commands to eject the CTM server installation CD:
- ```
cd /
eject cdrom
```
- Step 3** Insert the CTM client installation CD and enter the following command:
- ```
cdrom/cdrom0/ctmc/CopyUpgradeFiles.sh
```

In the output, you should see:

```
Copying the client upgrade files can take several minutes.  
Copying CTM Client upgrade files...  
Copying Solaris client upgrade files  
Solaris client upgrade files copied  
Please insert CTM client Windows CD to CD ROM, Copy will continue in 60 seconds...  
Could not find Window Client CD, Please insert CTM client Windows CD to continue  
Copy will continue in 300 seconds...  
Copying Windows client upgrade files  
Done...All upgrade files have been copied to server successfully!  
Please hit Enter key to return to the prompt mode
```

**Note**

This operation will occupy 800 MB of disk space.

5.4 New Zealand Daylight Saving Time Updates

If you are located in New Zealand, you must apply the steps described in [Appendix D, “Updating CTM Daylight Saving Time for New Zealand”](#) to make the CTM server compliant with the New Zealand DST settings update.